AMENDMENTS TO THE CLAIMS

1-19. (Cancelled)

20. (Previously Presented) An artificial cardiac pump comprising:

a housing;

an axial body fixed in said housing;

an impeller arranged so as to be rotatable around said axial body, said axial body extending through said impeller;

a driving mechanism for rotating said impeller such that blood taken in from a front side of said impeller is force-fed to a rear side of said impeller along an axial direction of said impeller;

a front-side fixed body connected to a front side of said axial body;

a rear-side fixed body connected to a rear side of said axial body such that said axial body is sandwiched between said front-side fixed body and said rear-side fixed body;

a straightening board protruding from an inner wall of said housing at the front side of said impeller, said front-side fixed body being fixed at said straightening board; and

a board-shaped diffuser protruding from said inner wall of said housing at the rear side of said impeller, said rear-side fixed body being fixed at said board-shaped diffuser,

wherein said impeller includes a sleeve and impeller wing-components protruding from an outer peripheral surface of said sleeve, said sleeve being arranged such that an inner peripheral surface of said sleeve faces an outer peripheral surface of said axial body across a gap, a front-end surface of said sleeve faces a rear-end surface of said front-side fixed body across a gap, and such that a rear-end surface of said sleeve faces a front-end surface of said rear-side fixed body across a gap,

wherein said driving mechanism comprises polar anisotropic permanent magnets installed in said sleeve and a rotary magnetic flux generator installed in said housing so as to surround an outer peripheral portion of said impeller, and

wherein said sleeve includes a first magnet arranged to face said rear-end surface of said front-side fixed body, and said front-side fixed body includes a second magnet arranged to face

said front-end surface of said sleeve, said first and second magnets being permanent magnets, said first and second magnets being arranged such that a pole of said first magnet faces a same pole of said second magnet so as to produce a repulsion force in an axial direction of the axial body between said first magnet and said second magnet.

21. (Previously Presented) An artificial cardiac pump as claimed in claim 20, wherein thrust hydrodynamic generation grooves for supporting a thrust load applied to said impeller are provided at said rear-end surface of said front-side fixed body and at said front-end surface of said rear-side fixed body.

22. (Cancelled)

23. (Previously Presented) An artificial cardiac pump as claimed in claim 20, wherein said first magnet and said second magnet each have a ring-shape and are each arranged coaxially with a rotational axis of said impeller.

24. (New) An artificial cardiac pump as claimed in claim 20, wherein said axial body extends through an entirety of said impeller.

25. (New) An artificial cardiac pump as claimed in claim 20, wherein said sleeve is arranged such that said front-end surface of said sleeve opposes said rear-end surface of said front-side fixed body in the axial direction of said axial body.

26. (New) An artificial cardiac pump as claimed in claim 20, wherein said first and second magnets are arranged such that said pole of said first magnet faces said same pole of said second magnet in the axial direction of said axial body.